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ABSTRACT

The Information Retrieval and Dissemination Center of Levittown, New York, was created in September 1968 and funded through ESEA Title II and Title III as a joint pilot exemplary project of Union Free School District 5 and the Levittown Public Library. It was established to provide teachers with a quantity of material to be used in a classroom situation so that students would be exposed to a variety of sources and would not be limited to the viewpoint expressed by their textbooks. The project was also designed to make readily available to students copies of material from several sources for detailed study at home rather than having them spend hours copying information from a few sources in the library. This final report of the project contains a summary of the findings, description of the services, objectives of the center, an evaluation of the project, and conclusions and recommendations. (Author/SJ)

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Information Retrieval & Dissemination Center

Levittown, New York 11756

LI 004 407

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(Note: This letter from Mr. Hanna, teacher of social studies, arrived in the closing days of the school year -- too late to be embodied in the report -- but it expresses clearly the goals for which the Center was established and is an indication of the measure of success we have had in attaining those goals).

Dear Mr. Turgeon:

In attempting to find meaningful and rewarding activities, both my students and myself would like to thank you and your remarkable staff for the tireless and thorough work we have benefited from this past year. Although every aspect of your service deserves applause, permit me to list those which this instructor finds outstanding.

1. Completeness: Whenever my class sends you a topic, we know that every possible aspect, every sub-topic will be researched.
2. Speed: I marvel at your being able to answer a request in two days!
3. Quality: No matter how large the request, your reproductions are always as easy to read as the original text.
4. Availability: You and your staff are always willing to give the extra time to listen on the phone or write that little note of clarification that enables a rough idea to become a viable learning medium.

In addition to these outstanding qualities of your service, perhaps the most important, as far as my needs are concerned, is the unlimited source of information and source materials made available to my classes. You have, through your skill and excellent work, aided my attempts to broaden and enrich the horizons of both my students and myself.

Sincerely,

/s/ David L. Hanna

David L. Hanna

SUMMARY OF FINDINGS

The success of the Center demonstrates conclusively the important role played by curriculum-oriented supplementary informational materials and resources in today's highly sophisticated secondary school environment.

The improvements in teacher preparation and student understanding of complex issues both in past and present society are everywhere evident in those groups and individuals who have taken advantage of the availability of the services of the Information Retrieval and Dissemination Center. The Center operations demonstrate conclusively that information resources can be made available rapidly and effectively with tremendous educational impact without complicated, extremely expensive, highly sophisticated computed-like retrieval systems.

The Center demonstrates that all that is required is a skilled, well trained staff servicing a concentration of information resources also equipped with simple and reliable rapid copy equipment and having available basic facilities for prompt distribution of the information gathered to the audience requiring the information.

In this way the duplication of expensive informational materials and service staff can be avoided and limited local funds can provide maximum accessibility and maximum impact of information resources and services in an educational system.

The Information Retrieval and Dissemination Center of Levittown, New York, was created in September, 1968, under ESEA Title II and Title III, as a joint pilot exemplary project of Union Free School District #5 and the Levittown Public Library. It was established to provide teachers with a quantity of material to be used in a classroom situation so that students would be exposed to a variety of sources and would not be limited only to the viewpoint expressed by their textbook. In this way the teachers would have greater access to material necessary to adequately support the curriculum. The project was also designed to make readily available to students copies of material from several sources for detailed study at home rather than having them spend hours copying information from a few sources in the library.

The need for the Center was identified as a result of a two-year study of assignments in public and non-public schools which were beyond the capacity of the total community library resources. The study pinpointed the types and quantities of library materials needed to successfully meet classroom and student research needs. It was evident that resource material of high quality was needed in many more situations than could be supplied by the conventional methods and materials available in both the school and public libraries. Further study showed that this need could not be solved with the available local funding, whereas the other identified problem areas, related to assignment generated student library use, could be alleviated to a great degree by intensive cooperative efforts of the school and public library.

The secondary school students (both public and non-public schools) and the teachers in Union Free School District #5, generate an especially heavy demand for research materials, including periodicals and documents. These materials are in demand by students for short reports, research projects and term papers and by the teachers as supplementary instructional materials for use in the classroom, or as background material in preparation for a classroom presentation. Very often the material needed related to local and national history going back to this country's beginning.

The Center was formulated in answer to the expressed and experienced needs of the teachers in the public and non-public schools for greater access to supplementary material (including primary source material) of great variety in both quality and quantity, for use with social studies, English and some science curricula, in order to generate continued interest and arouse the intellectual curiosity of today's highly sophisticated students. Similarly, student needs, expressed and experienced, made it quite clear that information resources had to be available in greater depth and with more ready accessibility than could be achieved by conventional library methods which require the student and teacher to expend the great majority of his energy in locating information and in coping with library house rules rather than being productively employed utilizing the information itself.

These student and teacher needs required a new approach to the use of community-wide informational resources, especially since every effort had to be made to insure that the limited community educational funds

available for building information resources were not used needlessly to purchase duplicates of expensive specialized materials, such as extensive back files of newspapers, periodicals and government documents of historical and current interest.

The three high school and three junior high school libraries at present subscribe to 691 periodicals, but this represents only 190 titles because of the need to duplicate material so that it can be available as needed in each school. In addition, space limitations make it impossible to retain substantial back files of most titles. The school district public library has made a considerable effort to meet these needs and currently subscribes to 447 periodical titles and has back periodical holdings of 6,623 bibliographic volumes, including substantial microfilm holdings.

The Center, with its two ESEA Title II Special Purpose Grant funds, has purchased 3,769 reels of microfilm and a smaller amount of microfiche (four titles - forty-two boxes). Special emphasis was placed on long runs of magazines and documents and appropriate indexes to provide substantial coverage for events of the late 18th, 19th, and 20th centuries. The bulk of this material was selected to insure that it could be reproduced freely and in large quantities, if needed, without any possible copyright infringement.

In addition to these periodical and document resources, the Center has at its disposal 93,932 volumes of adult non-fiction and 12,784 pamphlets and government documents.

The creation of the Information Retrieval and Dissemination Center, supplied with a specially selected microfilm collection including both periodicals and documents, backed by the total resources of the school district public library, and housed in the same building with it, staffed and equipped to locate, reproduce and distribute supplementary curriculum and research material, serves as a model of a progressive program embodying a unique service concept.

* * *

The search cycle begins with receipt of requests from teachers and students for "IRC" services. The searches are requested for a variety of purposes (e.g., to locate primary source material for use in a classroom situation or contemporary accounts of events from a variety of sources and viewpoints, to assist in the preparation of reports and research projects, to determine the availability of research material on a particular topic, to help solve a complex reference problem).

A clear, concise statement of the search request is important for effective retrieval. Requests are made on forms provided by the Center and are submitted through the local school libraries. In order to improve search requests and optimize use of the Center, brochures have been prepared to assist users in understanding the capabilities, limitations, and conditions under which searches are accomplished.

In submitting his search request, the user is asked to present a

detailed, specific statement of requirements, to cite possible sources that he may know of, and to state any restrictions to be placed on the search. In the case of a teacher search, the number of copies of each citation is also requested.

The search specialist is a trained intermediary who must interact with the requester and the available materials. This interaction can occur at several different levels, including:

- (1) request forms received in the mail, with no direct contact;
- (2) request form received in the mail after the requester has had discussion and advice from his school librarian;
- (3) request received by telephone call (and later confirmed in writing);
- (4) request received during direct interview with requester.

Searchers are encouraged to clarify requests and make liberal use of the telephone before beginning to formulate the search.

Once the specific subject has been ascertained, all appropriate indexes are searched for pertinent material and listed on a work sheet. When all relevant indexes have been utilized and the search extended to unindexed material within the relevant time period, the work sheet is given to a clerk whose job it is to locate and reproduce the citations listed thereon. Student requests are delivered to the public library which will then locate and supply appropriate books and pamphlets. When all citations have been located and reproduced, and the public library has furnished all appropriate book materials, the searcher re-evaluates the

materials for relevancy, discarding all irrelevant materials, if any, and the materials are then packaged and sent the requester with an Evaluation of Services form which the requester is asked to complete and return to the Center. Daily deliveries to each school insures prompt availability and dissemination of the information requested. The average turnaround time for searches (receipt in the Center to forwarding results) has been four days.

* * *

The month of September, 1968, the initial period of the project, was devoted to the training of a staff inexperienced in this type of school library service; the unpacking, accessioning and processing of microfilms, supplies and equipment; the institution of procedures and retrieval techniques for the efficient handling of requests, and the preparation and dissemination of literature on the project defining its objectives, functions, limitations and conditions under which requests would be handled.

To insure effective utilization of the Center, the project director has met with the administrative staff, teachers, and the school librarians of the public and private schools to acquaint them or review with them, the project, its resources, and the procedures for utilizing them, and for developing and maintaining an in-depth relationship with the faculty of those schools. Teachers were also encouraged to invite the project director to visit their classes to answer any student questions

and to demonstrate with samples, the Center's services.

From September 27, 1968, when the first request was received, to June 15, 1971, a total of 1581 search requests were serviced at the Center; 1089 of these requests were made by teachers and remaining 492 were initiated by students. The areas which have been benefited most by the Center are social studies, English and science since the Center's microfilm material was chosen especially for applicability in augmenting the curriculum in these subjects. Experience has shown however, that the teachers in other subjects also benefit because much of the available material is also useful as supplementary material for classroom use when reproduced rapidly and in quantity.

To fully understand the quantities of material involved in answering these requests, it should be recognized that over 14,062 individual articles were identified and reproduced (out of more than three times that many examined), and a total of 156,529 pages were photocopied and distributed to teachers and students.

These figures represent an average of 3.3 requests completed per working school day, an average daily dissemination of 329 pages of material, by a staff of 1.5 professional librarians and two clerks. These figures gain significance when it is remembered that one of the professionals, the project director, has been responsible for meeting with administrators, teachers, school librarians and students; attending conferences and meetings; devising and testing techniques and developing the detailed simple and direct methods of handling requests and informing the district of the Center's

services, supervising the expenditures of funds budgeted and all personnel assigned; the preparation of reports as required and for all aspects of integrating the Center operation into the overall education programs of both public and private schools located in the district.

* * *

The major objectives of the Information Retrieval and Dissemination Center are:

- (1) Provide teachers with background material for classroom use by students.
- (2) Provide teachers with in-depth background material for their personal use in preparation for a classroom presentation or topic.
- (3) Provide teachers with supplementary material for student use in preparation for classroom oral presentation.
- (4) Provide teachers with visual aids (illustrative, primarily.)
- (5) Provide students with source material for a brief report.
- (6) Provide students with research material for a research project or in-depth written report.
- (7) Make possible the prompt and efficient servicing of requests for special bibliographies.
- (8) Eliminate the need for duplication of expensive information resources and facilities.
- (9) Keep statistics and perform analysis of its own operations to provide the information needed to monitor and improve service effectiveness. (As a pilot project, the successful operation of the

(9) Continued

Center sets a pattern which can be followed by other areas in cooperation with area public libraries by providing valid data concerning information resource collections, equipment to disseminate, retrieval techniques, reproduction equipment suitability and instructional techniques required to insure proper utilization of the facility.)

- (10) Permit future expansion to incorporate new and as yet not completely defined-hence secondary-objectives.

These objectives are quite realistic and have been, for the most part, effectively accomplished. A more complete discussion of how these objectives have been accomplished is contained in the following pages.

* * *

To determine how effectively the Center was meeting the research needs of the teachers and students it serviced, it was felt at the outset that a qualitative evaluation form should accompany each request, as completed. With this evaluation device we were able to gather, in part, the necessary data for this final report as well as to assure quality control.

The Center's objectives, as given on pages 9 and 10, have, we feel, been met. And, in meeting these objectives, we have not only provided the in-depth research information needs of our students and teachers-- the needs for which the Information Retrieval and Dissemination Center was established-but we have also proved through this experimental project that the unusual service concepts upon which it was based are a practical and realistic approach to meeting such needs.

How well has the Center met these needs? From the data gathered from the qualitative evaluation forms it was found that 74% of the responding teachers and students reported that 100% of the materials furnished them pertained to their topic; 21% reported that 75-95% of the material pertained to their topic and less than 5% of the total respondees found that less than 75% pertained to their topic. The latter figure can in part be attributed to ambiguous requests ("psychology of drivers - men as opposed to women;" "different approaches to the understanding of war"), topics upon which little material is in print ("different somatotypes in relation to track and field athletics;" "the Cuna Indians of Panama and their shamanistic practices"), or topics so broad in scope that materials

supplied covered only one or two aspects ("any information on criminology;" "any material relevant to the study of the Industrial Revolution").

In response to the question "Were you furnished materials from a sufficient variety of sources?" 96.8% answered yes and only 3.2% replied no. The majority of the negative replies were received from teachers and students whose requests, to begin with, precluded diverse sources in that very little has ever been published on these topics.

While the majority of the material furnished students was used in the preparation of term papers (65.5%), a smaller percentile (34.5%) used the Center's services to secure material for a brief written report (2-5 pages) or for oral reports. When asked to give an evaluation of the quality of student papers (intellectual content) of students using the Center's services and those not using the Center's services, Mr. Lawrence J. Lasker, teacher of social studies wrote:

"Their many term papers reflect a higher quality as well as more comparative view of the topics being researched. The more facets of a topic a student is exposed to makes for a more meaningful and more thoughtful conclusion."

The Center is basically a research agency and as such it has provided teachers with the results of research which has enabled them to better prepare themselves for day-to-day classroom presentations. Further, it has put into the hands of the teachers and their students supplemental material which has, for many, presented a new dimension in learning, for, as Mrs. Isabelle Wojnar, Homemaking teacher puts it:

"Our child care study unit was brought to life with many of the ideas contained in the articles as well as the resumes of experiments done in various communities of our country."

More interesting of note is the fact that 66.5% of respondents used 100% of the materials furnished, 22% used 75-95% while only 11.5% used less than 75%. Investigation has revealed that students are more apt to use less materials than teachers for when answering their evaluation form they interpret the word "use" to mean only those sources actually cited in their reports or term papers.

Materials furnished the teachers have been used in many ways. In addition to being used as background material by a teacher for use in preparation for a classroom presentation, materials furnished teachers have been used by students as well for background material in the classroom, in study groups, for group discussions, for oral presentations and for debates. Certain teachers exchange amongst themselves materials received from the Center thereby increasing its value. With the materials readily at hand, or readily available through the Center, the Center's influence is felt not only in the subject matter content but in the educational methodology as well.

Quantitative evaluation of the Center is furnished in Table 1 and Table 2 provides recapitulation of the qualitative evaluation forms returned by 1098 of the Center's 1581 users, some of the more noteworthy observations of which have been discussed in these pages. Together with the preceding comments, these two tables should provide an overview of the effectiveness of the Center.

TABLE 1

QUANTITATIVE EVALUATION

September 27, 1968 -- June 15, 1971

1. TEACHER REQUESTS

a. Number received	1101
b. Number satisfactorily filled	1089
c. Average number of titles per request filled	7.7
d. Average number of pages per title	4.6
e. Total number of pages of photocopies disseminated	132,789

2. STUDENT REQUESTS

a. Number received	492
b. Number satisfactorily filled	492
c. Average number of titles per request filled	11.6
d. Average number of pages per title	4.2
e. Total number of pages of photocopies disseminated	23,740
f. Total number of books furnished by Levittown Public Library	715

3. Number of items of Center materials used in the Levittown Public Library by District 5 teachers and students

3,169

Number of working days this period

475

Average number of requests completed per day

3.3

TABLE 2

TABULATION OF REQUESTS RESPONSES TO EVALUATION FORM ON CENTER SERVICES*

EVALUATION OF CENTER EFFECTIVENESS

	YES	NO
Material supplied within deadline supplied by requester	1090	8
Requester satisfied with quality of reproductions	1074	24
Material furnished from a variety of sources satisfactory to requester	1063	35
	PER CENT	NO.
Material pertinent to topic described on request	100%	814
	95-99	49
	90-94	80
	85-89	39
	80-84	34
	75-79	32
	Less than 75%	50
Material used by requester of material supplied by the Center	100%	730
	95-99	48
	90-94	62
	85-89	31
	80-84	58
	75-79	40
	Less than 75%	129

HOW MATERIALS REQUESTED WERE USED

<u>Teachers</u>	No. of Requests
Background material for use by teacher in preparation for classroom presentation.....	460
Background material for classroom use by students.....	224
Supplementary material for student use in preparation for classroom <u>oral</u> presentation.....	100
Visual aids (illustrative primarily).....	21
<u>Students</u>	
Research material for an in-depth written report (term paper)	192
Source material for a brief written report (2-5 pages).....	101

* Data taken from 1,098 evaluation forms returned by teachers and students

FINDINGS

-14-

The duplication of expensive materials can be avoided by coordinated effort to concentrate available information resources and maximize accessibility to local resources thus making optimum use of school and library funds available to meet curriculum-oriented information demands.

By having readily accessible quality information resources the quality of teaching is improved and student horizons are expanded. By having readily available quality information resources students acquire a better understanding of a subject area thereby making an assigned student research project much more meaningful to them and not just another incidental place of work to be completed haphazardly.

The project emphasizes that with a minimum investment in terms of staff salaries, equipment, and materials, coupled with the accessibility of these quality materials available in the quantity necessary, the impact of library services on both students and teachers increases in geometric proportion because of the concentration of resources and the availability of an agency able to respond quickly to an information need and effectively disseminate that information. An intensification of impact of this magnitude cannot possibly be achieved by applying the same funds and resources in traditional programs of library service.

The Center is a unique school library/public library cooperative program in the United States servicing both teachers and students, combining the educational goals of the school district and the school oriented service goals of the public library. A continuing literature search has revealed an increasing number of articles which suggest a

solution similar to the Center to deal with the problem of adequate supplementary material to assist the classroom teachers in meeting the needs of today's more sophisticated students. These articles also reveal that outside of Levittown no such agencies exist in the United States and that the only like center in actual operation is the Education Centre Library of the Board of Education for the City of Toronto, Canada.¹

The literature further reveals a growing number of highly sophisticated automated computer-based systems of information handling and dissemination but these agencies all appear to be highly specialized in either or both audience and subject area. Seemingly, the only agency similar to but not like the Levittown Information Retrieval and Dissemination Center is the program called R.I.S.E. (Research and Information Services for Education), an agency of the Montgomery County, Pa., public school system which services twenty-two (22) school districts in the county. Its services, however, are limited to teachers and administrators only and it deals exclusively with educational research. With its much larger staff (11 full-time and 14 part-time members) it serves a different audience in a more limited, specialized subject area.²

¹For literature on the operation of this library, see: Saturday Review, April 17, 1965, p. 76-9; Educational Record, July, 1963, p. 294-6; Library Journal, March 15, 1963, p. 1121-1123 and September 15, 1963, p. 3251-3253.

²"A One-Step Information Center," American Education, July-August, 1968, p. 26.

CONCLUSIONS AND RECOMMENDATIONS

The unique service concept embodied in the Center, its effectiveness, and its acceptance by the teachers and students of the district have made the Information Retrieval and Dissemination Center an integral part of the Levittown School Library System. The Board of Education, upon the recommendation of the Superintendent of Schools, has undertaken to provide the necessary funding to insure that this unique educational facility would continue to be available to the teachers and students of the district and would continue to serve as an outstanding example of the kind of library support which can be anticipated by other less forward-thinking districts throughout the country.

The success of the Center has prompted the Superintendent of Schools to charge the Center's director to conduct an investigation into the possibility of broadening the scope of the Center's operation to include more students and other interested residents of Levittown and/or Nassau County residents, through the Nassau Library System, to allow more people to take advantage of the services offered by the Center. Such an investigation will, of course, require many months but it is to be hoped that at its conclusion, many more people will be able to avail themselves of the Center's services.

Throughout the past three years, the Center staff has been concerned with meeting the supplementary informational needs of the teachers and students of the district and has continually critically reexamined its methods and techniques to insure that the best possible service was provided. Comments on its service and suggestions for possible

possible improvement have been encouraged from its users. Because of the many laudatory comments and the very few negative comments or suggestions for improvement, the Center today is basically what it was originally planned to be. To date, no changes or modifications have had to be made to the original plan.

It is difficult to conceive of any school district/public library retrieval and dissemination center trying to provide all teachers and all students with in-depth research material in all subject areas. The cost of resource material alone would be prohibitive. Accordingly, it is recommended that anybody with a like need should conduct a detailed study, involving school and public librarians, school and public library administrators, and curriculum planners and coordinators, to determine their greatest need (as in Levittown it was found to be in the social studies and English curricula). Experience has shown that by developing the collection in these two areas other subject areas benefit as well. In essence, the recommendation is that anyone planning to meet determined needs similar to those met by the Center should work on the inverted pyramid effect in developing its materials collection, equipment collection, staffing, etc. Such a procedure would not only be the most efficient and economical but would also permit of systematic expansion to incorporate new ideas, the ability to satisfy unidentified service needs, and the ability to enlarge or broaden its audience as the needs increase and funds become available.

Once the greatest need or needs have been determined, and if at all practical, an on-site visit to the Levittown Information Retrieval

and Dissemination Center should be made. Such a visit could provide valid data concerning quantity of use of information resource collections, equipment to disseminate, retrieval techniques, reproduction equipment suitability and instructional techniques required to insure maximum utilization of the facility. Copies of the simplified forms developed at the Center may be obtained and either imitated or modified to satisfy local requirements.

Should such an on-site visit be impractical or impossible, requests may be sent to the Center for copies of any or all of the following materials for study

- Original Project Proposal
- Annual Reports, June 1969
- Annual Report, June 1970
- Internal Procedures (in-house step-by-step mechanics of handling requests from receipt to transmittal)
- Forms used at the Center
- Copies of brochures, leaflets, flyers etc., disseminated by the Center.

More specifically, the Center will answer any questions which experience enables it to answer.

To establish a cooperative Information Retrieval and Dissemination Center, utilizing the maximum community information resources available (and anticipated), there should be a strong basic collection housed in a central location. This would provide maximum accessibility of the information resource collection of the community to the retrieval staff personnel, as well as to the members of the community.

Provision should be made for the necessary equipment to expedite location of information and rapid reproduction of that same

information. It is essential that the needed specialized equipment be available for the exclusive use of the retrieval staff personnel.

At least one microfilm reader-printer is necessary to locate specific material from the microfilm collection and produce the first copy required. If additional copies are necessary, that copy will be placed on some piece of rapid copy equipment, the dial set for the number of copies needed, and the machine can be left to run off the copies required. Flat copy, of course, would require only the use of the rapid copy equipment.

The expected volume of use will determine the total amounts of staff and equipment necessary to successfully operate a like Center.

It is essential that all personnel involved with the Center be in sympathy with the objectives and concepts embodied in the service program of the Center. Effective and continuous community-wide dissemination of pertinent information on the Center should be made not only to apprise its users of its services and limitations, and the procedures to be followed in securing these services, but also to generate and maintain their continued interest and support.